Commission Regulation (EU) 2017/1154 of 7 June 2017 amending Regulation (EU) 2017/1151 supplementing Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Regulation (EC) No 692/2008 and Directive 2007/46/EC of the European Parliament and of the Council as regards real-driving emissions from light passenger and commercial vehicles (Euro 6) (Text with EEA relevance)

COMMISSION REGULATION (EU) 2017/1154

of 7 June 2017

amending Regulation (EU) 2017/1151 supplementing Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Regulation (EC) No 692/2008 and Directive 2007/46/EC of the European Parliament and of the Council as regards real-driving emissions from light passenger and commercial vehicles (Euro 6)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information[(1)], and in particular Article 14(3) thereof,

Having regard to Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive)[(2)], and in particular Article 39(2) thereof,

Whereas:

(1) Regulation (EC) No 715/2007 is a separate regulatory act under the type-approval procedure laid down by Directive 2007/46/EC.

(2) Regulation (EC) No 715/2007 requires new light passenger and commercial vehicles to comply with certain emission limits and lays down additional requirements on access to information. The specific technical provisions necessary to implement that Regulation are contained in Commission Regulation (EU) 2017/1151[(3)].

Changes to legislation: *There are currently no known outstanding effects for the Commission Regulation (EU) 2017/1154. (See end of Document for details)*

(3) The Commission has performed a detailed analysis of the procedures, tests and requirements for type approval that are set out in Regulation (EC) No 692/2008 on the basis of own research and external information and found that emissions of Euro 5/6 vehicles generated by real driving on the road substantially exceed the emissions measured on the regulatory New European Driving Cycle (NEDC), in particular with respect to NOx emissions of diesel vehicles.

(4) The type-approval emission requirements for motor vehicles have been gradually and significantly tightened through the introduction and subsequent revision of Euro standards. While vehicles in general have delivered substantial emission reductions across the range of regulated pollutants, this was not the case for NOx emissions from light passenger and commercial diesel vehicles. Actions for correcting this situation are therefore needed.

(5) Defeat devices which reduce the level of emission control are prohibited by Regulation (EC) No 715/2007. The revelation related to the use of defeat devices in diesel vehicles and the subsequent national investigations have highlighted the need to strengthen the enforcement of the rules on defeat devices. Therefore it is appropriate to require a better supervision at type approval of the emissions control strategy applied by vehicles, building upon the principles already applied to heavy duty vehicles by Regulation (EC) No 595/2009 of the European Parliament and of the Council[(4)] and its implementing measures.

(6) It is important to address the problem of NOx emissions from diesel vehicles in order to contribute to decreasing the current high levels of NO_2 concentrations in ambient air, which are a major concern regarding human health.

(7) The Commission has established in January 2011 a working group involving all interested stakeholders for developing a real-driving emissions (RDE) test procedure better reflecting emissions measured on the road. The Joint Research Centre of the Commission published two studies in 2011 and 2013 on the feasibility of on-road testing and assessment of other technical options. After thorough technical discussions, the option suggested in Regulation (EC) No 715/2007, i.e. the use of portable emission measurement systems (PEMS) and not-to-exceed (NTE) limits has been developed and implemented as complementary regulatory test procedure.

(8) The first two parts of the RDE test procedure were introduced by Commission Regulations (EU) 2016/427[(5)] and (EU) 2016/646[(6)]. It is now necessary to complement them with the provisions that allow taking into account the cold start, introduce the necessary protocol and limits for measuring particle number (PN) emissions, take proper account of regeneration events and make sure that provisions exist for hybrid electric vehicles, light commercial vehicles and small volume manufacturers.

(9) Cold start is an important contributor to emissions from light passenger and commercial vehicles, being especially important in urban areas where most of the cold starts occur. Especially during winter, cold starts contribute significantly to the air pollution in cities and should therefore be regulated appropriately. In order to carry out a comprehensive and effective evaluation of the RDE is therefore necessary to include cold start into the

evaluation of the urban and total trip emissions for both NOx and PN emissions using the existing evaluation methods.

(10) Furthermore, in order to reduce the variability of testing conditions that could overshadow the contribution of cold start, special provisions should be laid down for the preconditioning of the vehicle and for driving during the cold-start period.

(11) Since recent data indicate that there is still an issue in the EU with higher than expected vehicle emissions during hot start, it is necessary to perform a certain number of tests starting with a warm engine.

(12) Regulation (EC) No 715/2007 set a temporary Euro 6 limit for the PN emissions of gasoline direct injection vehicles in order to allow appropriate lead time to integrate effective PN emissions control technologies, while stipulating that within three years from the mandatory Euro 6 dates, PN emissions should also be regulated under real driving conditions.

(13) For this purpose, the Commission set up a task force in 2013 led by the Joint Research Centre with the aim of examining the newly developed PEMS equipment for measuring Particulate Mass and Particle Number and developing a measurement method for PN emissions in real-world driving, which should be included in this act.

(14) The equipment for measuring the PN emissions was found to be reliable and well performing in a wide variety of conditions. It is expected that the equipment will improve with time. Furthermore, the emission profiles of ultrafine particles below the current measurement threshold of 23 nm are being investigated by the Commission to ensure that the measurement methods adequately cover real-world PN emissions.

(15) Provisions should be laid down allowing also for hybrid electric vehicles to be evaluated. For plug-in hybrids the methodology should be adapted in order to ensure practicality and robustness of RDE provisions and to prepare a more complete evaluation method that can provide an accurate picture of the RDE emissions of plug-in hybrid vehicles and can thus be also included in local or national incentive schemes designed to promote the use of such vehicles.

(16) Regeneration should be included in the evaluation of vehicle emissions under the RDE procedure. In order to ensure consistency of the RDE procedure with the Worldwide harmonised Light-duty vehicles Test Procedures (WLTP), it is appropriate to introduce a methodology which mandates the use of K_i-factors for excess emissions through regeneration and a related evaluation scheme.

(17) Updating of the K_i-factors may be required to reflect changes in vehicle specification and technological progress. Revisions may be necessary to ensure that K_i-factors reflect the real-world occurrence and magnitude of regeneration events.

(18) In order to ensure that light commercial vehicles with a speed limitation can also be tested under the RDE procedure, special provisions for the speeds boundaries should be included for those vehicles.

(19) In order to allow independent small volume manufacturers with worldwide annual production of less than 10 000 units to adapt to the RDE procedure, they should be

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provided extra time to fully meet the NTE limits. However, it is appropriate to require them to monitor the NOx emissions during that period.

(20) The ultra-small volume manufacturers should be exempted from the provisions of the RDE procedure. With a volume of less than 1 000 vehicles sold each year in the Union they contribute only marginally to the total emissions of the light passenger and commercial vehicle fleet.

(21) Article 15(6) of Regulation (EU) 2017/1151 requires an examination of the legal provisions of Directive 2007/46/EC to be carried out following the introduction of the WLTP tests to ensure a fair treatment as regards vehicles already previously approved against the New European Driving Cycle (NEDC) test requirements.

(22) That examination shows that the requirements of Regulation (EU) 2017/1151 should be applicable to newly registered vehicles, including those the types of which were previously approved on the basis of the NEDC tests laid down in Regulation (EC) No 692/2008. All new vehicles, whether their types were previously approved on the basis of the NEDC tests or whether their types are approved on the basis of the WLTP tests for the first time, must, in accordance with Article 15 of Regulation (EU) 2017/1151, fulfil the requirements of Annex IIIA to that Regulation as of 1 September 2019. For N1 vehicles of classes II and III and category N2 vehicles, the relevant date is 1 September 2020.

(23) To ensure that the type/approval authorities are fully informed of the application of that rule, this application should be mentioned in Section II. 5, Remarks, of the EC-type-approval certificate, as set out in Appendix 4 of Annex I to Regulation (EU) 2017/1151.

(24) The provisions regarding the obligation of manufacturers to declare the auxiliary emission strategies (AES) are clearly linked to the prohibition to use defeat devices. Therefore, the need for the approval authority to make a decision during type approval based on the risk assessment and health and environmental effects of the AES should be clearly stated in the legislation and the contents of the extended documentation package should enable that authority to make that decision.

(25) In order to ensure transparency, to allow comparison with values measured during independent testing and to allow for the development of incentive schemes by local or national authorities, the obligation for the manufacturer to declare the maximum value of NOx emissions and the maximum PN in RDE tests in the certificate of conformity of each vehicle should be introduced.

(26) The Commission should keep under review the provisions of the RDE test procedure and adapt those provisions to accommodate new vehicle and/or measurement technologies and to ensure their effectiveness. Similarly, the Commission should keep under annual review the appropriate level of the final conformity factors for gaseous pollutants and particle number in light of technical progress. It should in particular review the two alternative methods for evaluating PEMS emission data set out in Appendices 5 and 6 to Annex IIIA to Regulation (EU) 2017/1151 with a view to developing a single method.

(27) It is therefore appropriate to amend Regulation (EU) 2017/1151 and Directive 2007/46/EC accordingly.

(28) The measures provided for in this Regulation are in accordance with the opinion of the Technical Committee — Motor Vehicles,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) 2017/1151 is amended as follows:

(1) Article 2 is amended as follows:

(a) point 32 is replaced by the following:

(32) "small volume manufacturer" means a manufacturer whose worldwide annual production is less than 10 000 units for the year prior to the one for which the type approval is granted and:

(a) is not part of a group of connected manufacturers; or

(b) is part of a group of connected manufacturers whose worldwide annual production is less than 10 000 units for the year prior to the one for which the type approval is granted; or

(c) is part of a group of connected manufacturers but operates its own production facilities and own design centre;;

(b) the following points 32a, 32b and 32c are added:

(32a) "own production facility" means a manufacturing or assembly plant used by the manufacturer for the purpose of manufacturing or assembling new vehicles for that manufacturer, including, where relevant, vehicles which are intended for export;

(32b) "own design centre" means a facility in which the whole vehicle is designed and developed, and which is under the control and use of the manufacturer;

(32c) "ultra-small-volume manufacturers" means a small volume manufacturer as defined in point (32) which has registrations of less than 1 000 in the Community for the year prior to the one the type approval is granted.;

(2) in Article 3(11) the following subparagraph is added:

The requirements of Annex IIIA shall not apply to emission type-approvals according to Regulation (EC) No 715/2007 granted to ultra-small-volume manufacturers.;

(3) Article 5 is amended as follows:

(a) paragraph 11 is replaced by the following: